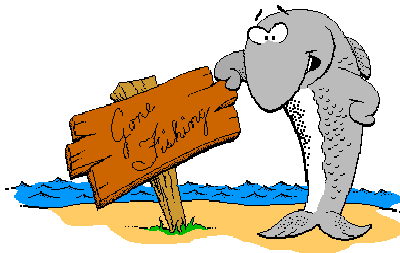


BIG HORN BASIN ANGLER NEWSLETTER



FEBRUARY 2001

QUOTABLE QUOTES: "ALL FISH ARE CREATED EQUAL, BUT SOME ARE MORE EQUAL THAN OTHERS"



The quote is a play on words from a passage in George Orwell's *The Animal Farm*, which reads "all animals are created equal, but some are more equal than others." The story is about barnyard animals that take over a farm. In setting up an animal government they conclude that all animals should be equal; however, over time it becomes apparent that some are better than others.

In the fisheries world, we have a similar problem. As conservationists, we believe that all fish have an equal right to their place in our rivers and streams. However, as fish managers we understand that, although this is a nice theory, it is not practical in fisheries management. For numerous reasons we place greater value on some species over others. For example, few anglers would say that a longnose sucker is just as important as a cutthroat trout, even though both are native. Many anglers prefer walleye over sauger, even though the sauger are native to our rivers. And finally, native minnows mean little to most anglers unless they are in need of bait.

In Wyoming, we have 49 native species. Most of us, including myself, would be hard pressed to name all 49. Of those 49, only nine are game fish and only one is a trout. While some native game fish have received attention, many of the "other fish" have been overlooked. The "other fish" category includes many of the lesser known native game fish, but also the non game fish like suckers, minnows and sculpins. A difficult challenge that we face is management of our native fishes. We say that all fish are equal, but as managers of the aquatic resource we are still struggling with how to incorporate native fish into traditional fisheries management.

The problem is that there is little or no information, management, or protection for these other species. Left alone, many may eventually go the way of the dinosaur. Within the Big Horn Basin, several minnow species are in decline, cutthroat distribution is shrinking, and genetic purity of sauger is threatened by stocking walleye. Even if you don't fish for these species, they are still important players in the fish community. Does anyone really care? I hope so. "All fish are created equal, but it seems that some are more equal than others" (or at least some taste better than others). Maybe the time is right to pay more attention to our native game and non game fish. Test your knowledge of native species by taking the quiz below.

Which of the following species are native (not introduced) to Wyoming?

- | | | |
|---------------------|--------------------|---------------------------|
| A. flathead catfish | G. pallid sturgeon | M. "Big Mouth Billy Bass" |
| B. channel catfish | H. mottled sculpin | N. shorthead redhorse |
| C. yellowfin tuna | I. piranha | O. brown trout |
| D. sauger | J. rainbow trout | P. cutthroat trout |
| E. flathead chub | K. walleye | Q. smallmouth bass |
| F. brook trout | L. stonecat | R. Iowa Darter |



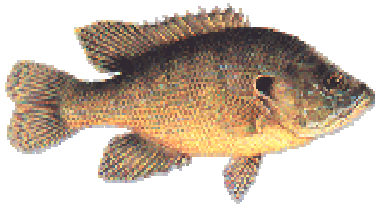
If you answered B, D, E, H, L, N, P, and R then you got them all.

Some of you may think that silly, singing "Big Mouth Billy Bass" (see picture) is a native. However, this fish is a recent introduction to our state that has become a real nuisance. We have tried several methods to eradicate this pest, but finally found that removing the batteries is the only way to kill it. Lets hope the spread of this obnoxious beast can be slowed. Several area anglers have already fallen ill, which has prompted the surgeon general to release the following

warning: repeated exposure to the "Big Mouth Billy Bass", or any of it's relatives, can result in headaches, nausea, vomiting, and male pattern baldness.

RENNER RESERVOIR: FEWER ADULT BASS, BUT MORE BIG HYBRID SUNFISH

Fishing at Renner last year was as good as ever, at least for high catch rates. What I did notice was that there appeared to be fewer "big" bass (10-15 inchers). In about two hours I caught over 20 bass, but not one exceeded 12 inches. Poor survival of young bass in 1998, combined with harvest of larger bass, has led to a decline in adult bass numbers. The good news is that there are still plenty of bass in the reservoir. In fact, the bass population is much more balanced than in the past, which is encouraging from a management perspective. The upcoming fishing season should provide plenty of nice bass in the 10-13 inch range, but not many over 13 inches. Fly-fishing a hopper or popper during the warmer summer months can be very productive and challenging. The challenge isn't hooking the fish, but landing it before it heads down into the vegetation. For spin fisherman try a weightless rubber worm, rapala, or a buzzbait (just before dark).



In 1998 we changed our strategy from bass and brown trout to bass and green sunfish-bluegill hybrids. Why? 1) Because the bass needed a food item to increase survival and growth and 2) The brown trout weren't faring well during the warm summers. Some may miss the brown trout, but when the hybrid sunfish take off I bet they will quickly be forgotten. In 1997 we stocked

6,750 hybrid sunfish, which was apparently just enough to feed the bass. Very few anglers reported catching any of the sunfish. In 1998 we increased the number stocked to 20,000, but then in 1999 we were able to stock only 8,000. The increased stocking in 1998 led to more hybrid sunfish in 2000. Our catch rate from boat electrofishing soared from 12 per hour in 1997 to 72.0 per hour in 2000. Average length of hybrid sunfish is now 4.2 inches with a maximum size approaching 10 inches. Our plan is to keep stocking at least 20,000 hybrid sunfish each year. If survival of our plants is good we should see a fishable population as early as next fall.

BIG HORN RIVER TAILWATER: IS THE NEW MANAGEMENT STRATEGY WORKING?

In September we shocked the river at Thermopolis to evaluate the new management strategy. Between 1993 and 1996 a study was initiated to determine if wild trout management alone could sustain the trout population at carrying capacity. The answer was no it could not, so in 1997 we started a new stocking strategy: 1) stocking trout at density that did not exceed the carrying capacity of the river (21,000 from Wedding of the Waters down to Black Mountain Bridge) and 2) stocking advanced fingerling or sub-catchable trout (4-6 inches).

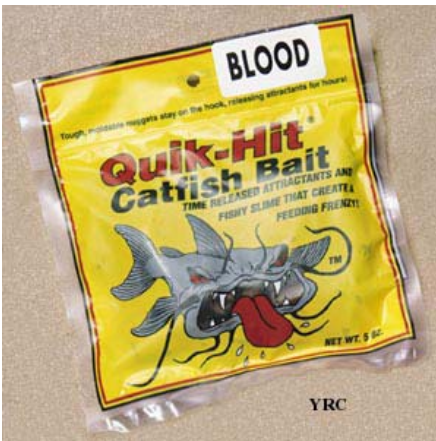


Sampling in 2000 found that rainbow abundance was lower than 1997, but higher than 1996. The biggest difference was in the size of the rainbow. In 2000 all the rainbow were less than 8 inches, while in previous years there were larger fish. What happened? Poor over winter survival of the hatchery rainbow stocked in 1998 and 1999. In the Big Horn, hatchery trout must reach a size greater than 11 inches by November to survive through the winter. The rainbow we stocked were only 4-5 inches and could not reach this size before winter. Although rainbow survival was poor, the cutthroat did well. Sampling found good numbers of cutthroat and some big ones (over 20 inches).

Species	Number Captured	Average Length	Length Range	Number Per Mile
1996				
brown trout	446	11.3	3.8-24.3	307
rainbow trout	271	14.6	4.1-21.7	124
cutthroat trout	35	17.5	15.7-19.8	---
1997				
brown trout	263	14.4	4.4-23.8	276
rainbow trout	444	13.2	7.5-20.6	217
cutthroat trout	98	10.2	7.5-19.2	---
2000				
brown trout	611	13.0	3.8-25.0	206
rainbow trout	206	5.2	3.8-7.4	181
cutthroat trout	376	10.0	4.1-22.7	258

Our new slightly revised strategy in the tailwater will be to cut back the number stocked, but increase the size of trout we stock (6-8 inches). By stocking bigger fish, we believe we can increase survival and greatly improve the fishing. Since we will not sample the river every year, it will be very important to get some feedback from the anglers. Give us a call to let us know how the new strategy is working.

CAT FISHING AT BECK LAKE?

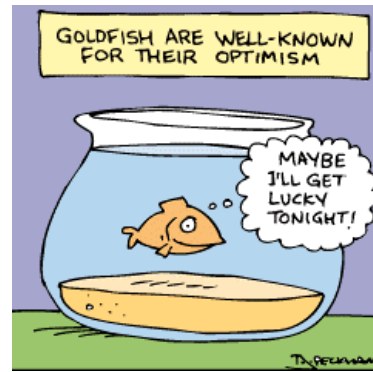


I have never fished Beck Lake, but that may change this year. The lake has always been a popular destination for some in-town anglers, especially kids in the summer. I pass by the lake every day on my way to the office and it seems like someone is always there fishing. Beck has a veritable smorgasbord of fish like black crappie, channel catfish, largemouth bass, yellow perch, cutthroat trout, rainbow trout, walleye, suckers, and carp. The problem is that, except for stocked trout, there aren't very many fish out there. Well judging by last years sampling that may be changing.

Sampling last year found the usual mix of fish, most in low numbers, but there was one pleasant surprise. Channel catfish numbers appear to be increasing. Channel catfish have been stocked many times in the last decade and are starting to take hold. So is Beck Lake a good place to try

some cat fishing? I'd say yes. The number of channel catfish in the lake is hard to estimate, but enough were caught during sampling to indicate that there is a fishable population. Also, several anglers have reported catching catfish (up to 7 pounds).

So how do you go about catching catfish? It's really not that hard. All you need is a medium to heavy action rod and a medium to heavy bait casting or spinning reel. Spool your reel with at least 12-pound test line. For bait I would use chicken livers, night crawlers, or cut bait on a 1/0 hook. I tend to shy away from commercial stink baits, because they stink. Catfish are crepuscular creatures, so the best fishing should be morning, evening, and through the night. If you fish during the day I would try deeper water, but stick to the shallow areas (2-4 feet of water) at night. If you go, don't expect to catch the monsters that you find at Yellowtail. Average size will be about 16 inches (2-3 pounds), but there are some around 26 inches (6-7 pounds).



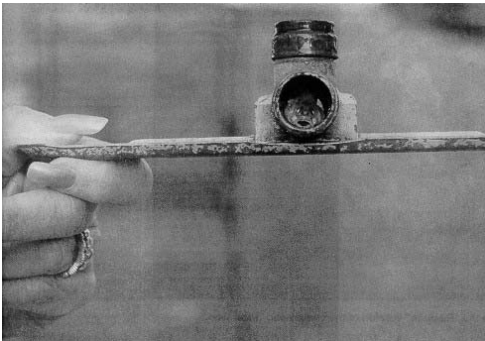
FISHES OF THE "WEIRD AND WACKY"



Needle-Nosed Fish Stabs Teen In Neck

Big Pine Key, Florida---A 17-year-old girl snorkeling for the first time was almost killed when a needle-nosed houndfish (what a cool name) jumped out of the water and struck her in the neck. Fortunately, Pamela Anderson and the rest of the Baywatch crew were there to come to her rescue. The attack was a close encounter with the grim reaper, since the bill came within a millimeter of severing her carotid artery. The young lady eventually recovered, but only after surgery to close her wounds and remove two pieces of the fish's serrated bill. Authorities are still unclear why the fish chose to assail the woman, but speculate that it may have been listening to rap music. Unfortunately, the incident has inspired another reality TV show, "When Fish Attack."

Small Fish Plugs Up My Neighbor's Sprinkler



Cody, Wyoming (A Big Horn Basin Angler Newsletter Exclusive Story)---Yes it is true! I had a close brush with the "weird and wacky". My neighbor, known only to me as Greg the guy who waters his lawn a lot, reported a strange occurrence to me. Apparently Greg was watering his lawn one day (on the wrong day, which I subsequently reported to the water police) and his sprinkler suddenly stopped sprinkling. Upon investigating the sprinkler head, Greg found that it was plugged with a small fish. Apparently the fish started in the reservoir, went into the canal, passed through a maze of waterlines, and negotiated it's way through the water hose, only to find the end of the line at the sprinkler head. Disney executives are currently negotiating for the movie rights and Greg himself plans a book about his watering adventures.

Beer Spill Kills Thousands Of Fish In Creek



Golden, Colorado (AP)---An employee of Coors Brewing Company flipped the wrong switch and sent 77,500 gallons of beer into a creek, killing thousands of fish. Not known, as of press time, was whether the employee had imbibed a little too much of the company product. The beer washed through a wastewater treatment plant before ending up in a local creek. Officials with the State Division of Wildlife could not give a precise number of fish killed, but estimate it was in the thousands. Eyewitnesses reported strange behavior in the fish shortly after the beer entered the

stream. Many of the fish began swimming in circles, some paired off to do some dancing, others passed out along the shoreline, but most just sat there with silly smiles on their faces. The employee was reprimanded. Not for the fish kill, but for wanton wasting of an adult beverage. On a brighter note, company officials found that passing the beer through a wastewater treatment plant dramatically improved the flavor.

Vicious Piranha Invades Local River



Cody, Wyoming (Another Big Horn Basin Angler Newsletter Exclusive Story). You heard it here first! Ok, maybe it wasn't quite that bad, but a dead piranha was discovered on the banks of the Shoshone River. A local fisheries biologist (me) speculated that the piranha outgrew its aquarium and was released into the river by its owner. A second theory from an amateur climatologist (me) is that global warming has altered our climate, allowing tropical species to inhabit our once frigid rivers. Don't believe in global warming? Hard to deny it with clear-cut evidence like this! A couple of quick phone calls to Al Gore and Leonardo DeCaprio (Titanic Guy) reassured me that yes this was probably the result of global warming. The influx of piranha could yet spell disaster for the blue-ribbon trout fishery, but we have no proof the piranha are eating trout. A stomach analysis turned up no small trout as we thought it would. However, we did find several index fingers and a thumb, apparently from fly-fishermen practicing catch and release.

PERCH STILL CAUSING PROBLEMS AT HARRINGTON

Harrington Reservoir was once the hottest bass fishing spot in the Big Horn Basin. In 1997, angling pressure and harvest were high. All was going well until some unwanted visitors, yellow perch, showed up. Where the perch came from is unknown, but we suspect they were either illegally introduced or came in through the canal. Regardless of their origin, they began to cause some problems. Since 1998, bass numbers have declined, while yellow perch numbers have increased. In 1999 we found a high density of adult perch, but young bluegill and bass were scarce. Anglers that cleaned some of the bigger perch found they had been eating young bass and bluegill. It doesn't take a fisheries biologist to figure out what was happening to all of the little bass and bluegill. They had become table fare for the ravenous yellow perch.



To counteract the yellow perch, we began removing them by electrofishing and stocked more bass in 1999. So did the removal of perch and additional stocking of bass do any good? This past year bass numbers were higher, but so were yellow perch numbers. In 1999, 46% of all perch sampled were greater than 7 inches. In 2000 we did not sample a single perch over 6 inches. The perch population exploded, but is now comprised of small perch.

So how do we rid ourselves of the pesky perch? We probably never will. As more bass reach a larger size we may see some reduction in the number of perch and more perch at a larger size. To get rid of the perch for good would mean draining the reservoir (which is not possible), or killing off all the fish with a toxicant (which is very costly). The best way to reduce perch numbers would be to stock a toothy predator, like walleye. But the walleye wouldn't just eat perch, they would also eat bass and bluegill.

So what can you expect for next year? Bass numbers have increased, but the average size last summer was only 7.4 inches. However, there are a fair number of bass between 13 and 16 inches and we might see some up near 20 inches this coming summer. Also, bluegill appear to be reaching a harvestable size.

ANNUAL EAST NEWTON SPAWNING OPERATION NETS 588,000 EGGS

The spawning operation at East Newton Lake was again a success. The statewide spawning crew was able to obtain 588,000 eggs from 226 female Eagle Lake rainbow trout. As many of you know, East Newton Lake is one of the sources for rainbow trout eggs, which are used to produce fingerling trout for stocking throughout the state. Although the egg take was successful, biologists did find three fish with tumors. The occurrence of tumors is not normal and will be closely monitored this year to ensure the health of the fishery.


During the egg take operation, fish were measured and weighed to monitor the fishery. Average size of trout in 2000 was similar to 1999, but average weight declined somewhat. The decline may have been due to unusually high harvest. The harvest rate was 0.63 trout per hour in 2000, compared to 0.49 in 1998 and 0.03 in 1999. East Newton Lake has a one fish over 20-inch limit and only artificial flies and lures are allowed. Consider giving the fishery a bit of a rest and harvest a nice trout photo





this year instead of a trout. Despite the slight decline, East Newton Lake remains one of our most popular fisheries and the best place to catch a big trout.


Species	Number Sampled	Average Length	Length Range	Average Weight	Weight Range
Brook	5	18.0	17.2-18.6	1.86	1.38-1.92
Brown	21	19.3	15.0-25.5	2.27	0.96-4.68
Rainbow	130	19.7	14.8-23.8	2.63	1.32-4.08
Splake	26	20.2	17.1-21.5	2.23	1.38-282


FISHING NEWS FROM AROUND THE BIG HORN BASIN


 **Casey's Pond** (Big Horn Mountains near Shell Creek Ranger Station) was recently renovated via a Fish Wyoming Project to provide better trout habitat. The pond will be stocked this spring with rainbow trout. Sorry old guys, the Forest Service is saving this one for the kids (kid's only fishing).

 **The South Worland Pond (Airport Pond)** will be the site of the next Fish Wyoming Project. The project will include increasing depth, habitat structures, screening the outlet, and improving facilities (restroom, parking area, garbage cans, and picnic tables). Fish management plans include stocking of largemouth bass and catchable-size rainbow trout.

 **Lily Lake** (Big Horn Mountains) was stocked last year with Yellowstone cutthroat fingerlings. The lake was previously managed for grayling, but suffered a winterkill in 1997. Serious kills appear to occur on an average of 15-20 years, so take advantage of it while you can. Cutthroat should be of catchable size by summer.

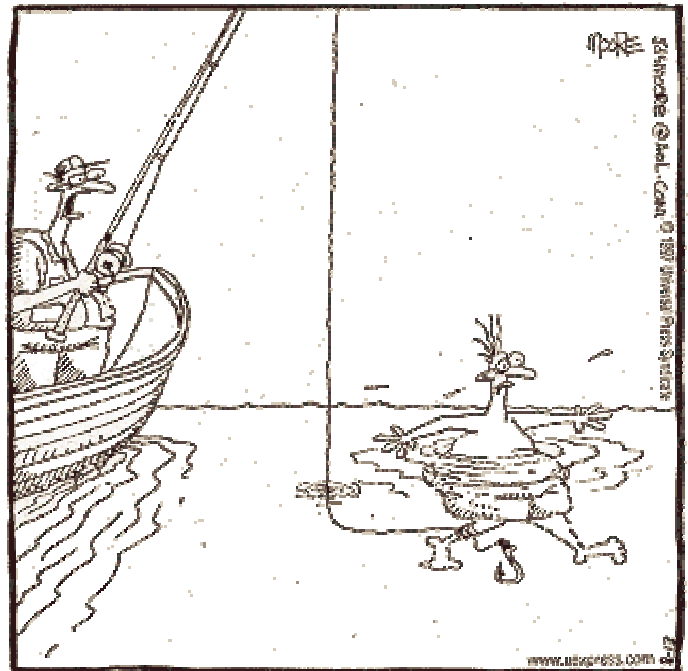
 **Sunlight Creek** is the subject of an ongoing study to evaluate fisheries values, irrigation systems, erosion problems, and stream dynamics. Sampling found a good population of brook and cutthroat trout, but some problems with stream habitat. The study may result in a redesign of a six-mile stream section. This project should solve many of the existing problems and improve the fishing.

 **Fubar Reservoir (Sand Coulee)** was renovated last year. The project included raising the water level five feet and protecting the dam from wave erosion. The reservoir was only 5-6 feet deep before the project, so increasing the depth will improve the fishery and extend the life of the reservoir. No reports yet from anglers on whether or not the fishery has improved.

 **Horseshoe Reservoir (Pond 5)** renovation was completed in November. The project included screening the inlet, increasing the depth, rebuilding the dam, and installing habitat structures. Habitat structures were built and installed by scout groups from Cody and Lovell. The reservoir was refilled in November and stocked with hybrid sunfish. Largemouth bass and catchable-size rainbow trout will be planted this year.



"Calm down and listen to me, Sid! Are you listening? We wait until they pass out, then we'll get loose and run for it."



"Don't just float there. Splash around and act like you're wounded."

TROUT NUMBERS INCREASE ON THE SHOSHONE



Electrofishing surveys on the Shoshone River below Corbett Dam indicate that the trout population has increased since 1995. Trout numbers in 1995 were 1,692 per mile, but had increased to 1,892 per mile in 2000. Cutthroat are the most abundant species, followed by brown trout and rainbow trout. Most trout average around 13 inches, but maximum size is up to 20 inches for cutthroat and rainbow and well over 20 inches for brown trout. This section of the river is stocked with cutthroat trout each year (about 1,700 per mile). The best fishing occurs after the irrigation season, through the winter, and into spring. If you haven't sampled this part of the river, get out and give it a try before spring.



NEWS BITES

FROM BUFFALO BILL RESERVOIR

- ❑ The numbers of rainbow trout taken by purse seine sampling continues to decline. Rainbow numbers are now at about 75% of normal, while cutthroat numbers are up about 20%.
- ❑ While rainbow numbers declined, sucker numbers increased substantially from 1999 to 2000. Average length of rainbow in 2000 was 13.9 inches, which was similar to average length in 1999 (13.8 inches).
- ❑ Reproduction and recruitment appear to be good. The number of 6-10 inch rainbow was 20% higher than in 1999.
- ❑ Using sonar, the total trout population was estimated at 76,800: 55,400 rainbow, 14,600 cutthroat, 4,100 lake trout, and 2,700 brown trout.
- ❑ Angler catch rates increased from 0.38 trout per hour in 1999 to 1.72 trout per hour in 2000.
- ❑ The crew will continue to work with the Bureau of Reclamation to stabilize water levels.

GOLDEN TROUT DECLINING IN COPPER LAKES



Sampling last summer in the Beartooth and Absaroka mountains revealed an abundance of brook, cutthroat, and rainbow trout, but golden trout numbers are down in some waters. In Copper Lakes 2 and 3, golden trout have not been stocked since 1993, due to a shortage of goldens in our hatcheries. Since there is little or no reproduction in these lakes or their tributary streams, golden numbers are slowly declining. On the other

hand, Copper Lake 1 still has an abundance of native Yellowstone cutthroat. If you are looking for high catch rates, target a lake with a high number per net hour like Copper Lake 1 or Spud Lake. A good combination of high catch rates and big trout can be found at Spud Lake or Teardrop Lake. A complete list of Mountain Lakes (location, number stocked, and most recent sampling data) is available at the Cody Regional Office.

Water Name	Species	Number Caught	Number Per Net Hour	Average Length	Length Range
Long Lake	Brook	57	2.38	7.6	3.7-10.2
	Cutthroat	34	1.42	9.6	7.5-11.7
	Rainbow	13	0.54	9.3	6.4-10.8
Native Lake	Cutthroat	21	1.34	8.2	4.6-11.4
Teardrop Lake	Cutthroat	27	2.43	9.5	7.4-13.0
Little Moose L.	Cutthroat	39	2.89	9.6	7.3-13.1
Spud Lake	Cutthroat	21	5.25	11.9	4.5-23.2
Copper Lake 1	Cutthroat	27	3.43	9.4	6.3-11.0
Copper Lake 2	Golden	7	0.46	10.8	7.4-14.2
Copper Lake 3	Golden	2	0.13	12.6	11.8-13.5

SAUGER STUDY NEARING COMPLETION



During the past two years we have spent a lot of time on the Big Horn River studying native sauger. Our objectives were to determine 1) how many sauger were in the river, 2) how they were distributed in the river and tributaries (Nowood, Shoshone, Greybull), 3) what type of habitat they needed, and 4) how much habitat was available. The goal of the study was to collect enough data to protect and enhance the Big Horn River sauger population.

I could dazzle you with a bunch of scientific jargon and statistical tests, but I know you anglers just want the bottom line. Here are some salient sauger facts.

- ❑ In Wyoming, sauger were once found in the North Platte, Powder, Tongue, and Wind-Big Horn River drainages. Today sauger are gone from the N. Platte and are rare in the Powder. A small population of sauger is found in the Tongue River, but the vast majority of sauger are found in the Wind-Big Horn River drainage (our back yard).
- ❑ Population estimates in the river indicate that there are an average of 60-70 sauger in each mile of river.
- ❑ Sauger prefer areas of the river where there is little or no current. During the winter, sauger move to deep, slow pools and are not very active. Activity levels begin to increase in early-March.
- ❑ Differences in habitat between sections of the river force sauger to move at different times of the year. For example, there are very few sauger around Worland in the wintertime. Most sauger move downstream where there are more pools to winter in.

❑ The range of a sauger throughout one year is around 24 miles, which is a pretty good chunk of river. Most of this movement occurs during the spring (moving to spawn) and summer (moving away from spawning sites to summer sites). During the summer the average home range is 3 miles, but during the winter average home range is less than a 1/10 of a mile.

❑ Within one year we tagged 2,539 sauger and recaptured 704. The high recapture rate indicates a small population. Anglers turned in about 125 tags, which indicates a low harvest rate (5% of total tagged were harvested).

❑ The longest movement we saw was 150 miles in a two-week period for a radio-transmitter sauger and 102 miles for a tagged sauger. The tagged sauger went from Greybull downstream to Yellowtail Dam in Montana.



❑ The sauger population in the Big Horn can be broken down into two separate populations, river-reservoir and river-resident. The river-reservoir population moves upstream out of Yellowtail Reservoir to spawn, but moves back shortly after spawning. The river-resident population utilizes the upper 2/3 of the river (Greybull to Worland), but rarely moves down into the reservoir.

❑ Most of the spawning occurs during the 2nd and 3rd week of May. Sauger congregate in the middle part of the river around Basin. During spawning, female sauger congregate on

the margin of the river, while male sauger are grouped up in the middle of the river. When it is time to spawn, several males will move over to spawn with a single female.



REEL FUNNY?

Frogs and Bourbon



A man went fishing one day. He looked over the side of his boat and saw a snake with a frog in its mouth. Feeling sorry for the frog, he reached down, gently took the frog from the snake, and set the frog free. But then he felt sorry for the snake. He looked around the boat, but he had no food. All he had was a bottle of bourbon. So he opened the bottle and gave the snake a few shots. The snake went off happy, the frog was happy, and the man was happy to have performed such good deeds. He thought everything was great until about ten minutes passed and he heard something knock against the side of the boat. With stunned disbelief, the fisherman looked down and saw the snake was back with two frogs!

The Ice Fisherman

One day a rather inebriated ice fisherman drilled a hole in the ice and peered into the hole and a loud voice said, "There are no fish down there."

Well he walked several yards away and drilled another hole and peered down into the hole and again the voice said, "There are no fish down there."

So he walked about 50 yards away and drilled another hole and again the voice said, "There are no fish down there."

Trembling with fear, he looked up into the sky and asked, "God is that you?"

"No, you idiot," the voice said, "it's the rink manager."

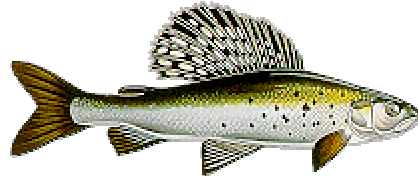
Give That Fish A Loan

A fish goes into a bank and approaches the teller. He can see from her nameplate that the teller's name is Patricia Whack. So he says, "Ms. Whack, I'd like to get a loan to buy a boat and go on a long vacation. Patti looks at the fish in disbelief and asks how much he wants to borrow. The fish says \$30,000. The teller asks his name and the fish says that his name is Rainbow Jagger, his dad is Mick Jagger, and that it's okay, he knows the bank manager. Patti explains that \$30,000 is a substantial amount of money and that he will need to secure some collateral against the loan. She asks if he has anything he can use as collateral. The fish says, "Sure, I have this," and produces a tiny porcelain fly rod and reel, about an inch long; detailed and perfectly formed. Very confused, Patti explains that she'll have to consult with the manager and disappears into a back office. She finds the manager and says, "There's a fish named Rainbow Jagger out there who claims to know you and wants to borrow \$30,000. And he wants to use this as collateral." She holds up the tiny rod & reel. "I mean, what the heck is this??" The bank manager looks back at her and says: "It's a knick-knack, Patti Whack. Give the fish a loan. His old man's a Rolling Stone."



The Fish Friar and The Chip Monk

One day while driving home from his fishing trip in the pouring rain, a man got a flat tire outside a monastery. A monk came out and invited him inside to have dinner and spend the night. The motorist accepted. That night he had a wonderful dinner of fish and chips. He decided to compliment the chef. Entering the kitchen, he asked the cook, "Are you the fish friar?" "No," the man replied, "I'm the chip monk."



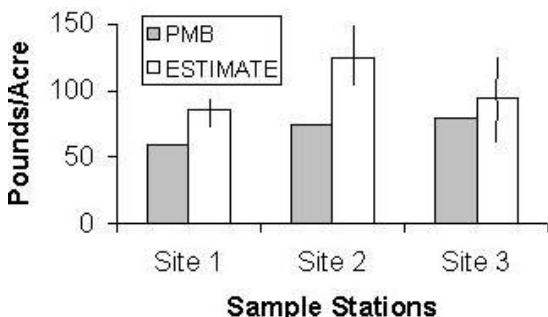
EVALUATING THE NEED FOR CATCH-AND-RELEASE ON TEN SLEEP CREEK



During the 1999 regulation meetings, anglers asked us to consider a catch-and-release regulation on Ten Sleep Creek. In last year's newsletter I discussed how we go about implementing new regulations. The need for regulations is evaluated based on biology. Will a regulation improve the quality of the fishery? Is there a need to protect the fishery from the angler? If the answer is no, then there is no need for the regulation. But some have argued that even though there is no biological need, the regulation could still be approved if the majority of anglers want it. Using sociology (wants and needs of anglers), rather than biology (the needs of the fish) to regulate a fishery is a new approach that has sparked serious debate among

anglers and biologists. Right now I believe that most of our regulations are based on biology. But in my opinion, I think now is the time to consider the sociological argument. **Could we or should we designate some streams as catch-and-release to satisfy the needs/wants of some anglers?** Let me know what you think. For now back to the issue at hand, what did we find on Ten Sleep Creek?

The question we wanted to answer was are anglers impacting the trout population through harvest? To answer this we first determined how many fish were in the creek by electrofishing and then determined how many fish the creek could support, using a method called Potential Maximum Biomass (PMB). We found very high numbers of fish at all three locations. Trout density ranged from 2,197 to 2,896 trout per stream mile. Needless to say that is a lot of trout. Although there are a lot of fish, the average size of trout is small. The small size has little to do with harvest, but a lot to do with the habitat. Ten Sleep Creek is not a productive stream and therefore cannot produce large trout. So after we got our estimates we then looked at what the stream could support.



As I said, PMB estimates how many fish the stream can support (carrying capacity). To estimate carrying capacity we looked at elevation, stream gradient, percentage of trout cover available, and the

width of the stream. The potential pounds of fish the stream could support and actual pounds of fish were very close at all sites (see figure). Of course this says that a regulation protecting the fish from harvest would not increase the total number of trout.

Available evidence suggests that a catch and release regulation would have little effect on trout biomass or trout size. So based on biology, there is no reason to implement the regulation. However, there is still that sociological argument. Do we implement a regulation because that is what the anglers want? If the regulation would not hurt the fishery and is acceptable to anglers, then it could be implemented in January 2002. Let us know what you think.

YELLOWTAIL RESERVOIR: THE BEST FISHING EVER?

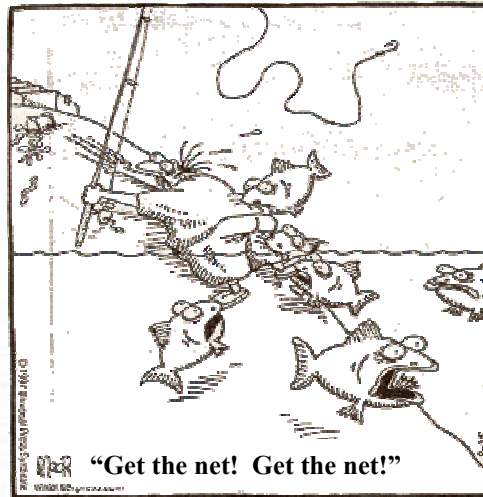


Some of you old-timers may disagree, but there is no doubt that fishing was the best it has been in decades. In past years you would be lucky to see a couple of boats at the Horseshoe Bend Ramp, but this year was a different story. When word of the good fishing leaked out, anglers flocked to the reservoir. What was the lure? Walleye mania!


In our sampling last fall we caught more walleye in our nets than ever before. The majority of walleye were two and three year olds (15-20) inches, but there were a considerable number of walleye over 20 inches. What's responsible for this tremendous surge in walleye? Well, three things: 1) better than normal water levels for several years, 2) a boom in forage fish (shiner) numbers, and 3) good survival of stocked walleye. Of course, the most important of these is higher water levels. Doesn't take a fish biologist to figure out that more water means more fish. High water provides more habitat for walleye, but also provides more habitat for forage fish. An increase in forage fish means better survival and growth of the stocked walleye. During the spring we did see a couple of walleye over ten pounds. Could Yellowtail provide us with the next state record walleye? Probably not, but it can provide us with some of the best walleye fishing we have ever seen. Fishing should be excellent again this year, so get out and enjoy it!





"You really are a fishing nut, aren't you?"




MORE FISHING NEWS FROM AROUND THE BIG HORN BASIN


 **Deaver Reservoir** sampling last year found that walleye numbers are still high, but average size had decreased from 13 inches in 1999 to 11 inches. However, that may not be bad news. The smaller average size is due to good survival of the 2000 plant. There were slightly more 15+ inch walleye compared to past years. We are considering reducing the walleye limit to three.


 **Scharen Subdivision Pond** (east of Greybull) has been stocked with rainbow trout, bass, and hybrid sunfish. The pond is part of a Fish Wyoming project completed last year. Although we have not sampled the pond, angler reports indicate that bass and trout plants have fared well. If you fish it this year, give us a call and let us know how the fishing is.


 **West Newton Lake** (near Cody) was restocked with Yellowstone cutthroat last summer, following chemical treatment to remove yellow perch. The original plan was to stock green-sunfish bluegill hybrids. However, after further consideration we decided that habitat was not well suited for hybrid sunfish and went with


cutthroat.


 **Diamond Creek Dike Pond** sampling indicated that trout numbers had declined, while sucker numbers had increased. Yellow perch, stocked in 1999, did not survive well enough to produce a fishable population. Future plans may include habitat enhancement or chemical treatment of the reservoir to remove non game fish.

 **Irma Mitigation Pond** (South Fork near Cody) appears to have an abundance of large splake (> 20 inches). A trophy splake fishery is a rarity, so consider practicing catch-and-release or limiting your harvest if you visit this small pond.

 **South Fork Dike Pond** trout numbers declined 34% from the previous year. Similar to Diamond Creek Dike Pond, non game (sucker) numbers appear to be on the rise. It appears that non game fish may be competing with the trout. For those seeking panfish, yellow perch numbers are increasing. Also, there are still some large brown trout (> 20 inches).

 **Wardell Reservoir** has been stocked each year since 1997 with fingerling walleye. We have received very few reports about the fishing at Wardell. Come on, give us a call. Those anglers that have called tell us that the fishing has been good for walleye with some over 20 inches. Also, in response to angler requests, we will be stocking white crappie each year.

 **Markham Reservoir** (Beck Lake Recreation Area-Cody) rainbow trout numbers have declined over the past several years. However, cutthroat numbers are increasing. Several anglers have also reported good catches of yellow perch. Yellow perch were first noticed this year and may have come in through the canal.

 **New Cody Reservoir** (the big one next to Markham) has also seen a slight decline in trout numbers, but fishing is still good for rainbow and cutthroat. Yellow perch have also invaded this reservoir and are now the abundant.

THE BIG FISH BOARD



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Photo 1: The Brandt boys did pretty well on northern pike at Ft. Peck.

Photo 2: Josh Harry with a BIG channel cat caught near Manderson.

Photo 3: Carter Nielson, Monte Steward, and Clint Steward (left to right) show off the cats they caught at the Causeway near Lovell.

Photo 4: Jerry Longobardi, Meeteetse Game Warden, with a nice cutthroat.

Photo 5: Jeff Stafford and Brian Hilbert know how to catch walleye at Yellowtail! (23 inches)








Photo 6: A young angler with a "plate of trout" at Kid's Fishing Day in Basin. You really should cook those first!

Photo 7: The biggest cat I have ever seen (20 pounds?!). Too bad I had to use electricity to get this one!

Photo 8: Lew Stahl, Aquatic Habitat Biologist, knows how to fish with electricity too! (Big Horn River smallmouth)

Photo 9: This is what a male sauger looks like during the peak of the spawning frenzy. Similar behavior can be observed in young male *Homo sapiens*.

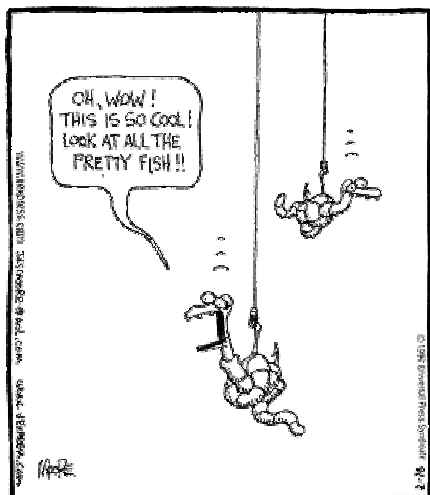
ODDS AND ENDS

-  The 5th annual **Basin Kid's Fishing Day**, sponsored by the Eagles, was again a huge success. Organizers plan to hold the event again in May 2001.
-  **Scharen Subdivision Pond** (east of Greybull) was stocked with rainbow trout last year. The new pond, another Fish Wyoming Project, is open to the public. Next year we plan to stock bass, hybrid sunfish, and more rainbow trout.
-  **Blue Ridge Reservoir**, near Basin may be the next site for a Fish Wyoming Project. A couple of anglers have taken it upon themselves to renovate this aging reservoir. This is a good example of how anglers can get involved in fisheries management and create some really good fishing.
-  **Kid's Fishing Days** will be held in Cody (Beck Lake Recreation Area) and Powell (Homesteader Park Pond) in June. Contact the city recreation districts for more information.
-  **Over 100 waters in the Cody area are scheduled for stocking** this year. A complete list can be obtained at the Cody office.
-  The first ever **Yellowtail Reservoir ice fishing derby** was held on February 10th. Sponsors of the event were Horseshoe Bend Motel and Cat Hunter Bait and Tackle (Lovell). Over 100 anglers participated in the derby. Most of the big fish turned in were ling, but there were some nice walleye and sauger too. The biggest walleye or sauger caught was a 4.6 pounder (sauger). Organizers plan a similar event next year and are also thinking about a catfish tournament this summer.
-  **Regulation meetings will be held throughout the Big Horn Basin in May.** A schedule of dates and locations should be announced soon.

THE FINAL WORD

It seems like only yesterday, but it was long ago (hey that's a song isn't it) when we published the first newsletter (1996). That first newsletter was conceived not by us (do we ever come up with any brilliant ideas?), but by a dedicated Big Horn Basin angler. I won't mention Robert's name, because the Crook's family has always tended to shy away from the limelight. But according to this angler, our (Game & Fish) biggest problem was lack of communication with the anglers. At that time, some anglers were unhappy with decisions we were making and others were just flat out unaware of what we were doing for them. With no open lines of communication, misinformation, rumormongering, gossip, slander, and libel were rampant. To squelch the misinformation and reestablish communication we put out the newsletter. The occasional group hug was also helpful.

So has the newsletter been effective? Yes and no. Yes, we believe it gets the information out to anglers and eliminates a lot of the misinformation. Where the newsletter has not been effective is getting feedback from you. Is anyone out there? If an angler is alone on the lake and screams out in pain when he runs a hook into his thumb, does anyone hear it? Oops, lost track of where I was going with this. We got a lot of feedback the first few years, but it seems to have tapered off. If you have any thoughts about our management strategies, please let us know. We have a toll free line set up just for this purpose (1-800-654-1178) and would like to hear from you. You can also send feedback via US mail (2820 State Hwy. 120, Cody, 82414), or e-mail (mwelke@state.wy.us).



Stupid worms.



"Is it urgent?"

Mike Welker

WY Game & Fish
2820 State Hwy. 120
Cody, WY 82414